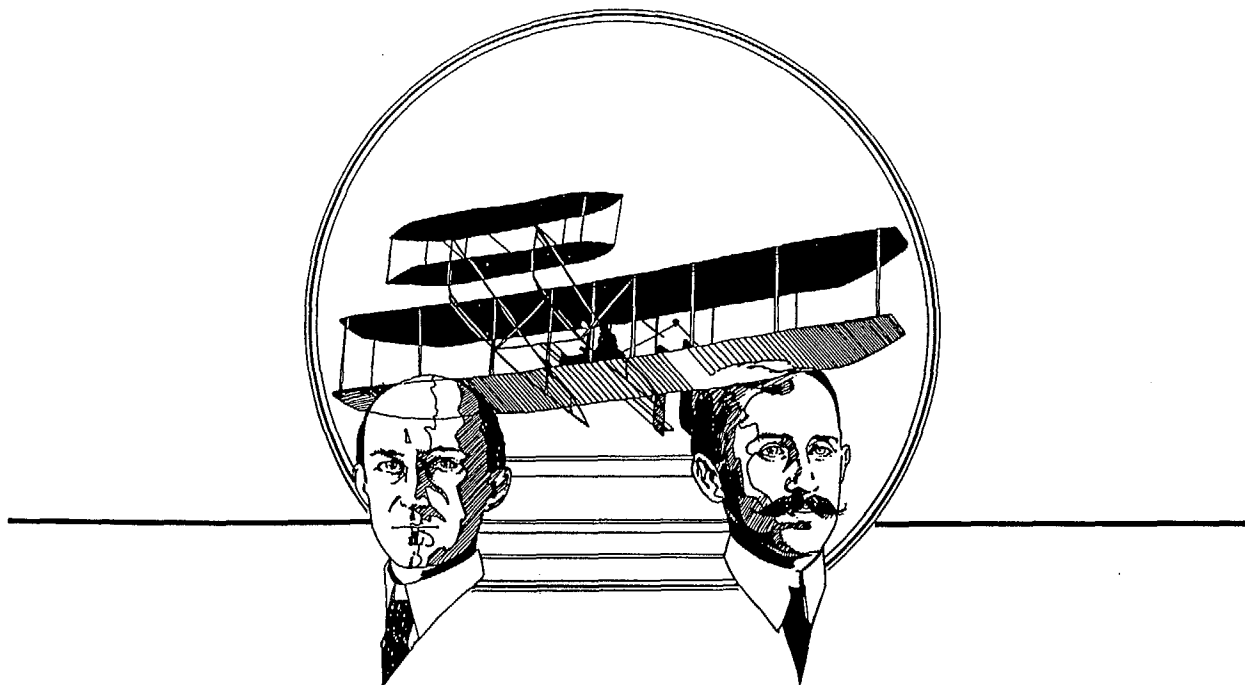


Chapter One  
INTRODUCTION

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## Chapter One INTRODUCTION

*Flagstaff Pulliam Airport*

### INTRODUCTION

The Flagstaff Pulliam Airport Master Plan update is being financed as a cooperative effort between the City of Flagstaff, the Arizona Department of Aeronautics (ADOT) and the Federal Aviation Administration (FAA). Within the policy guidelines and development parameters set forth by the FAA and the Arizona Department of Aeronautics, the consultant will produce a plan which outlines recommendations for the airport's future development. The plan will effectively present the research and logic which supports the forecast aviation demand and recommended facility improvements. The plan will use graphs and tables to facilitate future planning and to assist management in the pursuit of airport objectives. The format and design of this plan is intended to make it a useful management tool for the duration of the planning period.

A planning study such as this entails detailed descriptions of present facilities, land usage, and socioeconomic data. It also reviews existing state and local plans to determine their influence on aviation demands in the area.

The Master Plan for Flagstaff Pulliam Airport must address the specific needs of the airport, evaluate its role within the regional airport system, and recommend uses of the airport's property and facilities which will maximize the community, state and federal investment in this facility. The City of Flagstaff recognizes the need to develop and operate the airport in the interest of both the aviation and non-aviation public.

### STUDY OBJECTIVES

The primary objective of the master plan is to produce a long-term development program

which will yield a safe, efficient, economical, and environmentally acceptable air transportation facility. The accomplishment of this objective requires an evaluation of the existing airport and a determination of what actions should be taken in the future to maintain an adequate, safe, and reliable airport facility to meet the needs of the community. The master plan process will provide a step-by-step, or phased, outline of the indicated developments, and give the Planning Advisory Committee (PAC) and the public an opportunity to review the plan's development. In this way, both the PAC and the public can contribute to the master plan process and provide direction and input that is vital to completing a successful airport master plan.

## STUDY APPROACH

To meet the preceding objectives, a study approach and schedule has been designed which will systematically identify the problem or need, offer alternative solutions, and develop a realistic and implementable plan within a relatively short period of time. The approach involves a step-by-step process which includes the following major elements:

- **Inventory of Existing Conditions** - Assemble and organize relevant information and data pertaining to air service at Flagstaff Pulliam Airport and its geographical area.
- **Forecasts of Aviation Demand** - Develop estimates of future levels of air traffic demand that will be required by the individual components, and the area.
- **Facility Needs Evaluation** - Determine the types and extent of facilities required to meet future demand levels. This is done by first analyzing the capacity of facilities, and identifying the facilities that

will be needed to meet the projected aviation demands over the next twenty years.

- **Airport Alternatives** - After reviewing preliminary alternatives, prepare and refine a recommended development concept for each significant functional area of the airport.
- **Environmental Evaluation** - Provide an analysis of the environmental factors that may be affected by future airport development.
- **Airport Plans** - Refine the recommended airport development concept into airport development plans.
- **Financial Management and Development Program** - Prepare a schedule for development of those facilities necessary to meet forecast demands, and analyze the costs associated with the implementation of the recommended plans.

Draft working papers (chapters) will be submitted during the course of the study to enable input from the Planning Advisory Committee, the City of Flagstaff, Arizona Department of Aeronautics and the FAA. These working papers, upon revision, will become chapters of the final report. The study is being developed on a nine month schedule, with final reports to be delivered to the City of Flagstaff by the end of 1987.

## AVIATION AND AIRPORTS

The growth and economic development of the United States has been directly related to the expansion and technological advancement of the transportation industry. Since the last master plan for Pulliam Airport, which was influenced by a declining national economy

during the period from 1979 to 1982, a robust national economic expansion has occurred which has had a major impact on aviation. Characterized by a favorable mix of declining inflation, rising output, and falling energy prices, the aviation industry has responded favorably to these influences. U.S. airlines recorded a record profit year in 1988 although the profit growth over the previous five years was not very spectacular. Some commercial air carriers continue to have operating losses in spite of a substantial increase in traffic demand. During this period the airline industry has been characterized by extreme fluctuation in fares while enplanement levels and passenger miles have steadily increased.

In the fall of 1978, Congress passed legislation that deregulated the commercial aviation industry for the purpose of improving air service, reducing fares and increasing airline profits and competition. In a recent evaluation by the FAA (FAA Aviation Forecasts Fiscal Years 1989-2000) of the effects of airline deregulation on the U.S. citizen, the FAA has come to the following conclusions:

- The majority of the travelling public has benefited from better air service since deregulation, although for the individual traveller, the benefit may depend upon where one lives and where one wishes to travel.
- On average, real fares have fallen since 1978 but the phenomena has not been uniformly distributed throughout the United States. Again, the fare an individual traveller pays depends on where one lives, where one desires to travel, the flexibility one has on travel dates and time, and whether one is willing to accept a substantial cancellation penalty. In this particular area, deregulations benefits may be difficult to measure.

- The industry's overall financial position has improved considerably over the past several years but there is considerable disparity between individual carriers. Profits tend to be distributed among a very few large carriers while long term debt and the interest payments thereon continue to be a major concern.
- The competitiveness of the airline industry remains a complex issue. There are those who believe the airline industry is less competitive than in 1978 and others who believe otherwise. The industry has gone through three distinct phases, expansion, consolidation and concentration and is about to embark on a fourth phase...globalization. The degree of competition among airlines depends upon which phase you are discussing.

General Aviation, an important sector of the aviation industry, has also undergone major changes since the last master plan. On the whole, general aviation has not responded to the current economic recovery, one of the most robust since the postwar period. In the past, general aviation has normally followed national economic trends. Several factors have played a major role in this disparity, such as higher aircraft prices, operating costs, interest rates and product liability costs. Also included as factors are lower cost alternatives (ultralights, for example), and changes in the tax laws.

The general aviation active aircraft fleet declined 1.3 percent from 1987 to 1988. Although the single engine piston aircraft numbers have increased from 1980 to 1988, multi-engine piston aircraft have declined. Turbine powered aircraft numbers have increased as well as rotorcraft during the same period. However, these gains have been offset by a decline in the number of pilots and the shipment of all types of general aviation aircraft.

These changes are also affecting civil airports as well. The number of **public** landing facilities in the United States has declined for 15 consecutive years even though the total number of all types of landing facilities (civil airports, heliports and others) increased. The rapid growth in airline traffic has resulted in serious congestion at 16 major hub airports<sup>1</sup> which has influenced the increase in the average delay to aircraft, from 5.8 minutes in 1978 to 7.8 minutes in 1987. <sup>2</sup> If nothing is done to enhance airport capacity, the number

of congested airports will rise to 58 by the end of the decade.

Other factors must be considered as well, such as the future direction of federal airport improvement programs. It will be the principal purpose of this study to bring all of these elements together, analyze their immediate and long term impacts on Flagstaff Pulliam Airport, and to provide a plan that will be viable throughout the planning period.

1 Airport Services Magazine, May 1988.

2 FAA Aviation Forecasts Fiscal Years 1989-2000.